

## Job announcement (Phy-07/2017)

The Department of Physical Oceanography and Instrumentation of the Leibniz Institute for Baltic Sea Research Warnemünde (IOW) is offering a

### Postdoc position in Physical Oceanography (Numerical modelling of microplastics transport)

Remuneration is paid in accordance with the TV-L salary scale at level EG 13 (40 working hours/week). The employment is temporary for 27 months. Part-time employment is possible. Starting date is 01 April 2018.

IOW is an independent institute of the Leibniz Association, engaged in system analysis of coastal and marginal seas, with a special focus on the Baltic Sea. The scientists of the four departments (Physical Oceanography, Marine Chemistry, Biological Oceanography and Marine Geology) cooperate within the framework of a joint research program.

#### Tasks

The international and interdisciplinary research project BONUS MICROPOLL (<https://www.io-warnemuende.de/micropoll-home.html>) investigates the pathways of microplastics in the Baltic Sea and their role for spreading of pollutants. In this subproject, the pathways of microplastics from source to sink shall be simulated by means of an existing ocean model (GETM) in order to contribute to our understanding of their transport.

The project tasks require (1) cooperation with project partners (see website) to generate model forcing data (sources of microplastics), (2) running model simulations on the HLRN supercomputing center, (3) extending the passive transport model by a module for particle accumulation at beaches, (4) evaluation of model results and comparison to actual findings of microplastics, as well as (5) publication of the results in international journals.

#### Employment requirements

Mandatory requirements:

- University degree in physical oceanography or a related discipline
- Experience in running numerical models in a parallel computing environment

- Proven programming skills in a high-level programming language (e.g. Fortran, C, C++; knowledge of scripting languages like Matlab only is insufficient)
- Good publication record in the past academic career
- Knowledge of the English language is required on a level which allows communication with the international project partners and publication in English-language journals without problems

Meeting the following requirements is considered beneficial:

- PhD in physical oceanography or a related discipline
- Experience in running geophysical models on supercomputers
- Programming skills in Fortran
- Very good publication record in the past academic career
- Knowledge of physical oceanography (ideally of the Baltic Sea)
- Proven successful cooperation in cooperative research projects (ideally interdisciplinary projects)

Please feel free to contact Dr. Hagen Radtke (hagen.radtke@io-warnemuende.de) if you have any questions regarding this job announcement.

Applications of disabled persons will be considered preferentially if professional and personal qualifications are comparable. Please indicate your disability in your application documents, and enclose a copy of your disability certificate.

IOW promotes equal opportunities for men and women, and received in 2013 and 2016 the Total Equality (TEQ) rating for these activities. Applications of female candidates are especially encouraged, and will be considered preferentially in the case of equivalent qualification. An overview over our equal-opportunity actions may be found at:

<http://www.io-warnemuende.de/equal-opportunity.html>

The Leibniz-Institute for Baltic Sea Research offers an attractive working environment in the immediate vicinity of the Baltic Sea. The institute has a broad scientific and technical expertise in all areas of marine research, and provides ideal working conditions through state-of-the-art technical infrastructure and equipment.

Applicants should send their complete application documents (including cover letter, CV, certificates, references, and publication list) **as a single PDF** no later than **11 January 2018** to:

bewerbung.physik@io-warnemuende.de

Subject: Phy-07/2017



Alternatively, the application documents can be sent by mail to the following address:

Leibniz-Institute for Baltic Sea Research Warnemünde (IOW)  
Human Resources Department  
Seestraße 15, D-18119 Warnemünde, Germany  
Keyword: Phy-07/2017

Please note that application and travel expenses cannot be covered.

For further information, please contact:  
Dr. H. Radtke, [hagen.radtke@io-warnemuende.de](mailto:hagen.radtke@io-warnemuende.de).

General information about your future place of work may be found at:  
<http://www.io-warnemuende.de>

